



## Appin Road Traffic Volume Comparison

To	Jack Gaggin, Kimberly Holiday, Henry Fok
From	Advanced Analytics & Insights Transport Modelling Function
Date	26/10/2023
Subject	Comparative Traffic Analysis for Appin Road: March 2013 vs. June 2022
Priority	ROUTINE

### Purpose

The Project has requested the Advanced Analytics & Insights Transport Modelling Function (TMF) to undertake an analysis of traffic volumes to comment on changes in volumes on Appin Road. To assist with this analysis, the project team provided TMF with;

- An exert of the Appin Road REF Determined Traffic Assessment providing traffic volumes for March 2013
- Tube count data for June 2022

### Background

The Appin Road Safety Improvements project is in the process of formulating an Addendum REF to encompass design modifications and adjustments to the project. Given the imperative nature of the project, it's vital to ensure the relevance of existing environmental and traffic conditions assessments. As part of this Addendum REF, it's essential to provide an updated traffic assessment to determine if there have been any consequential changes to the environment or the project area since the prior assessment. The primary objective of this comparative analysis is to discern if the earlier evaluation still mirrors the current traffic conditions on Appin Road or if notable changes have transpired.

### Approach

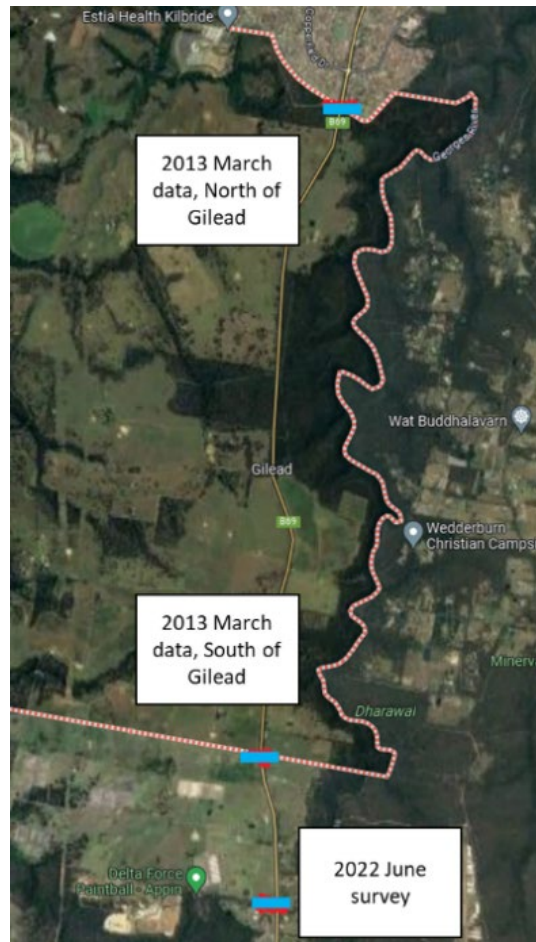
Traffic data from 2013 was compared with data from a Tube count study conducted between the 2nd and 29th of June 2022. Our primary objective was to discern any significant alterations in traffic volumes during this period.

## Findings

To assist with this analysis, the project team provided TMF with;

- An excerpt of the Appin Road REF Determined Traffic Assessment containing traffic volumes for March 2013
- Tube count data for June 2022

The location of this data is presented in the following figure.



While the data isn't precisely in the same location, there are no sinks or sources of traffic between the 2013 traffic count site and the 2022 traffic count site, allowing them to be reasonably comparable. The following table contains the observed traffic count data.

The data presented in the Table 6-9 (Page 79) of the Appin Road REF Determined Traffic Assessment document is labelled as average weekly. We suspect that this labelling is incorrect for the following reasons.

1. The volumes provided in Table 6-9 are in the order of 6,000 veh, which appears too low for a 7 day weekly count. Additionally,
2. We also reviewed the Mount Gilead Rezoning - Traffic, Transport and Access Study prepared by Parsons Brinckerhoff in 2014, which providing a stick diagram of the 2013 counts. Figure 5.1 and 5.2 (page 21 and 22) provide the turning count volumes for 2013, which are significantly higher than the "weekly" volumes provided in Table 6-9 of the Appin Road REF Determined Traffic Assessment document.

For these reasons, we strongly suspect that Table 6-9 is mislabelled and our analysis below assumes the volume in this table as daily.

Location	DATE	NORTHBOUND Average daily volumes	SOUTHBOUND Average daily volumes	TOTAL
Appin Road_north of Gilead	2013_MARCH	5,843	5,847	11,690
Appin Road_south of Gilead	2013_MARCH	5,832	5,822	11,654
Appin Road_ Brian Road	2022_JUNE	5,337	5,370	10,709

Observations from the traffic survey data indicate;

- For Appin Road north of Gilead, there was a decrease of 981 daily vehicles from March 2013 to June 2022 (approx. -8%).
- For Appin Road south of Gilead, there was a reduction of 945 daily vehicles from March 2013 to June 2022 (approx. -8%).

Heavy vehicle proportions were estimated to be approx. 13% in 2018, as outlined by the Appin Road REF Determined Traffic Assessment. The 2022 survey data also indicated a similar heavy vehicle percentage of 13.3%.

## Conclusion

The traffic volumes on Appin Road, both north and south of Gilead, saw a slight decline from 2013 to 2022. Given the consistent decrease in both locations, it's evident that traffic conditions on Appin Road might have changed. The use of the previous REF traffic volumes would constitute a conservative approach and does not warrant new traffic modelling.